

AMENDMENT UNDER 37 C.F.R. § 1.111  
U.S. APPLICATION NO. 09/989,377  
ATTORNEY DOCKET NO. Q66255

**REMARKS**

Applicants thank the Patent Office for initialing the references listed on the PTO-1449 form submitted with the Information Disclosure Statement filed on November 21, 2001, thereby confirming that the listed references have been considered.

Applicants thank the Patent Office for initialing the references listed on the PTO/SB/08 A & B form submitted with the Information Disclosure Statement filed on January 31, 2003, thereby confirming that the listed references have been considered.

Claims 1-38 have been examined on their merits.

Applicants herein editorially amend

Claims ALL are all the claims pending in the application.

1. Claims 1-3, 5-7, 9, 10, 16 and 22 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Wolff (U.S. Patent No. 6,067,545) in view of Peterson *et al.* (U.S. Patent No. 5,699,510). Applicants traverse the § 103(a) rejection of claims 1-3, 5-7, 9, 10, 16 and 22 for at least the reasons discussed below.

The Patent Office acknowledges that Wolff fails to disclose, *inter alia*, at least one matching resource. The Patent Office alleges that Peterson *et al.* provides the necessary disclosure to overcome the acknowledged deficiencies of Wolff.

With respect to claim 1, Wolff fails to teach or suggest redundancy of systems, due to the Patent Office's erroneous interpretation of load-balancing activity and redundancy. Claim 1 recites, *inter alia*, a computer that performs load-balancing between tasks given to a network

resource and tasks given to its redundant network resource, *i.e.*, not necessarily the same task, for the purpose of utilizing also the redundant resources (*see, e.g.*, paragraph [0030] of the instant application), and moves tasks from a failing network resource to the matching redundant resource. Wolff clearly lacks this capability. Furthermore, while Wolff arguably discloses the remapping of network paths, this does not necessarily mean that there are independent pathways of performing the communication. For example the case of a network where it is possible to get from A to E in the following ways: A→B→C→E or alternatively, remapping in accordance with Wolff, by means of pathway A→D→C→E. The remapping may enable an alternate path, but such a path is not redundant, because if the C→E network fails, the choice of the alternate path will not help. No redundant pathway exists between A and E, and Wolff cannot overcome this deficiency.

Applicants agree with the Patent Office's statement that Peterson *et al.* disclose a mirror system. Although this could be considered as data redundancy, although one of skill in the art would not balance loads between the two mirrors, as by definition they are duplicate, and hence balanced.

The combination of Wolff and Peterson *et al.* fails to teach or suggest at least a computer that balances task loads between resources and matching redundant resources using both a communication medium and a redundant communication medium, as recited in amended claim 1. As discussed above, the combination of references does not teach or suggest at least load-balancing between tasks given to a network resource and tasks given to its redundant network resource, nor does the combination of references teach or suggest at least a redundant

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communication medium that is separate from a communications medium coupled to a network resource, as recited in claim 1. Thus, Applicants submit that the combination of Wolff and Peterson *et al.* fail to meet the “all limitations” prong of a *prima facie* case of obviousness with respect to claim 1.

Since neither Wolff nor Peterson *et al.* teach or suggest at least the load-balancing and redundant communications medium recited in amended claim 1, Applicant submit that one of skill in the art would not be motivated to combine the references. Thus, Applicants submit that the combination of Wolff and Peterson *et al.* fail to meet the motivation prong of a *prima facie* case of obviousness with respect to claim 1.

Based on at least the foregoing reasons, Applicants submit that claim 1 is in condition for allowance over the combination of Wolff and Peterson *et al.*, and further submit that claims 2, 3 and 5-7 are allowable as well, at least by virtue of their dependency from claim 1. Applicants respectfully request that the Patent Office reconsider and withdraw the § 103(a) rejection of claims 1-3 and 5-7.

With respect to independent claims 9, 16 and 22, Applicants submit that claims 9, 16 and 22 are in condition for allowance over the combination of Wolff and Peterson *et al.* for at least reasons analogous to those discussed above with respect to claim 1. Applicants also submit that claim 10 is allowable as well, at least by virtue of its dependency from claim 9. Applicants respectfully request that the Patent Office reconsider and withdraw the § 103(a) rejection of claims 9, 10, 16 and 22.

2. Claims 4, 8, 11-15, 17-20, 23-26 and 28-38 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Wolff in view of Peterson *et al.* and further view of Richter *et al.* (U.S. Patent Publication No. 2002-0107962). Applicants traverse the § 103(a) rejection of claims 4, 8, 11-15, 17-20, 23-26 and 28-38 for at least the reasons discussed below.

Richter *et al.* discloses, *inter alia*, a storage device, and more specifically discloses dedicated block-level cache processor capable of block level cache processing and direct block data switching to a network interface engine. The combination of Richter *et al.* with Wolff and Peterson *et al.*, however, fails to overcome the deficiencies of the combination of Wolff and Peterson *et al.* as discussed above with respect to independent claims 1, 9, 16 and 22, *i.e.*, load-balancing between tasks given to a network resource and tasks given to its redundant network resource, and a redundant communication medium that is separate from a communications medium coupled to a network resource. Thus, Applicants submit that the combination of Wolff, Peterson *et al.* and Richter *et al.* fail to meet the “all limitations” prong of a *prima facie* case of obviousness with respect to claims 4 and 8.

Since neither Wolff, Peterson *et al.* nor Richter *et al.* teach or suggest at least the load-balancing and redundant communications medium recited in claims 4 or 8, Applicant submit that one of skill in the art would not be motivated to combine the references. Thus, Applicants submit that the combination of Wolff, Peterson *et al.* and Richter *et al.* fail to meet the motivation prong of a *prima facie* case of obviousness with respect to claims 4 and 8.

Based on at least the foregoing reasons, Applicants submit that claims 4 and 8 are in condition for allowance over the combination of Wolff, Peterson *et al.* and Richter *et al.*, and

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Applicants respectfully request that the Patent Office reconsider and withdraw the § 103(a) rejection of claims 4 and 8.

With respect to dependent claims 11-15, Applicants submit that claims 11-15 are in condition for allowance over the combination of Wolff, Peterson *et al.* and Richter *et al.* for at least reasons analogous to those discussed above with respect to claims 4 and 8, and due to their dependency from claim 9. Applicants respectfully request that the Patent Office reconsider and withdraw the § 103(a) rejection of claims 11-15.

With respect to dependent claims 17-20, Applicants submit that claims 17-20 are in condition for allowance over the combination of Wolff, Peterson *et al.* and Richter *et al.* for at least reasons analogous to those discussed above with respect to claims 4 and 8, and due to their dependency from claim 16. Applicants respectfully request that the Patent Office reconsider and withdraw the § 103(a) rejection of claims 17-20.

With respect to dependent claims 23-26, Applicants submit that claims 23-26 are in condition for allowance over the combination of Wolff, Peterson *et al.* and Richter *et al.* for at least reasons analogous to those discussed above with respect to claims 4 and 8, and due to their dependency from claim 22. Applicants respectfully request that the Patent Office reconsider and withdraw the § 103(a) rejection of claims 23-26.

With respect to independent claim 28, the combination Wolff, Peterson *et al.* and Richter *et al.* fails to teach or suggest at least cache control nodes capable of supporting an address resolution protocol and capable of load balancing storage control nodes, as recited in amended claim 28. Other than the Patent Office's assertion, there is no support that the block-level cache

processor of Richter *et al.* supports address resolution protocol and load balancing of storage control nodes, is equivalent to a block-level cache processor of Richter *et al.* Thus, Applicants submit that the combination of Wolff, Peterson *et al.* and Richter *et al.* fail to meet the “all limitations” prong of a *prima facie* case of obviousness with respect to claim 28.

Since neither Wolff, Peterson *et al.* nor Richter *et al.* teach or suggest at least address resolution protocol and load balancing of storage control nodes as recited in claim 28, Applicant submit that one of skill in the art would not be motivated to combine the references. Thus, Applicants submit that the combination of Wolff, Peterson *et al.* and Richter *et al.* fail to meet the motivation prong of a *prima facie* case of obviousness with respect to claim 28.

Based on at least the foregoing reasons, Applicants submit that claim 28 is in condition for allowance over the combination of Wolff, Peterson *et al.* and Richter *et al.*, and further submit that claims 29-38 are allowable as well, at least by virtue of their dependency from claim 28. Applicants respectfully request that the Patent Office reconsider and withdraw the § 103(a) rejection of claims 28-38.

3. Claims 21 and 27 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Wolff in view of Richter *et al.* Applicants traverse the § 103(a) rejection of claims 21 and 27 for at least the reasons discussed below.

The combination of Wolff and Richter *et al.* fail to teach or suggest at least load redistribution between remaining communication paths and remaining redundant communication paths, as recited in independent claims 21 and 27. As discussed above with respect to the other

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independent claims, neither Wolff nor Richter *et al.* teach or suggest at least the load balancing and redundant communication path assignment features of the present invention recited in claims 21 and 27. Thus, Applicants submit that the combination of Wolff and Richter *et al.* fail to meet the “all limitations” prong of a *prima facie* case of obviousness with respect to claims 21 and 27.

Since neither Wolff nor Richter *et al.* teach or suggest at least the load balancing and redundant communication path assignment features recited in amended claims 21 and 27, Applicant submit that one of skill in the art would not be motivated to combine the references. Thus, Applicants submit that the combination of Wolff and Richter *et al.* fail to meet the motivation prong of a *prima facie* case of obviousness with respect to claims 21 and 27.

Based on at least the foregoing reasons, Applicants submit that claims 21 and 27 are in condition for allowance over the combination of Wolff and Richter *et al.*, and respectfully request that the Patent Office reconsider and withdraw the § 103(a) rejection of claims 21 and 27.

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In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

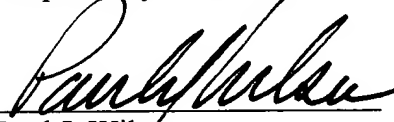
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**23373**

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